# 4.0 ROADWAY SYSTEM PLAN

## 4.1 FUNCTIONAL CLASSIFICATION

A key element of the study involved updating and refining the functional classification plan for the roadways in the study area that was developed as part of the original MATAPS plan. The designated function of the road is defined by the role it plays in serving the flow of trips through the overall network or system. A formal process for determining urban and rural functional classification is outlined in the Federal Highway Association's manual, Highway Functional Classification – Concepts, Criteria and Practices, March 1989. The concepts and guidelines in this manual were used in updating the functional classification plan for the MATAPS study area.

The following roadway/system characteristics were considered in the functional classification process:

- The trip length characteristics of the route as indicated by length of route, type and size of traffic generators served, and route continuity.
- The ability of the route to serve regional population centers, regional activity centers and major traffic generators.
- The spacing of routes to serve different functions (need to provide access and mobility functions for entire area).
- The ability of the route to provide continuity through individual travelsheds or between travelsheds.
- The role of the route in providing mobility or land access (number of accesses, access spacing, speed, parking, traffic control).
- The relationship of the route to adjacent land uses (location of growth areas, industrial areas, neighborhoods).

Municipalities with a population greater than 5,000 are considered "urban areas" by the U.S. Census Bureau. Areas that meet this definition have the ability to define an urban roadway system and obtain additional funds to maintain and construct the system. The Mankato area population (Mankato and North Mankato), as counted by the 2000 census, is approximately 44,000. The boundary of the established urban area is shown on Figure 4 on page 2-2. The established urban limits do not have any real impact on a route's function; however, they do trigger a change in the functional classification terminology. It is a common practice that major collectors and minor arterials be "bumped" up one classification when entering an urban area. For example, minor arterial routes that carry regional traffic into and out of the urban area normally become principal arterial routes in the urban area, and major collector routes that feed traffic from the rural area into an urban area may become minor arterial routes. Rural and urban areas also have differences with respect to classifying collector streets. For example, in rural areas, collector routes are split into two groups, major collectors and minor collectors. The

major collector routes are generally longer and connect smaller rural communities, carry intra-county traffic, and connect major collectors with arterial routes. Minor collector routes are less important collector routes connecting less-developed rural areas with major collector routes and arterial routes. Within the urban area, there is a single group called collectors. The collector routes in the urban area feed traffic to the arterial routes and provide important access functions to major traffic generators.

Using the above criteria, the study partners made a number of recommendations for modifications to the existing functional classification system during the original MATAPS planning effort. A number of the recommendations from the original plan were put forward to Mn/DOT for approval. Many of the recommendations outlined in the study were approved; however, there were a number of roadways that were not modified because they either were not submitted or they could not be approved due to mileage limitations (these changes would be completed as local mileage is added). The following list identifies functional classification changes that were recommended in the original MATAPS plan that have not yet been made:

- Main Street was recommended to be changed from a minor arterial to a collector. This change was recommended due to the close spacing with other arterial streets in the area, the number of local accesses, trip length and the length of the route.

- Balcerzak Drive was recommended to be changed from a minor arterial to a collector. This change was recommended due to the construction of Stadium Road. Stadium Road provides better access to MSU, it is a longer east-west route (connecting two other major north-south routes: Victory and Blue Earth County CSAH 16), and provides better arterial route spacing with Madison Avenue and Glenwood Avenue.

- An arterial connection is recommended between Madison Avenue and Blue Earth County CSAH 3 (Thompson Ravine Road). This arterial should be an extension of Victory Drive to satisfy north-south traffic flow needs. This connection would provide better access to the Hospital and other businesses in the Madison East area, provide a continuous north-south arterial between Riverfront Drive and TH 22, and would remove many short trips on TH 22/TH 14 destined to the River Hills Mall area.

- A multi-collector connection using three routes has been adopted by the City of Mankato for the Mayan Way area. (Due to the map scale, these routes are shown as a single line.)

- Additional collectors are recommended for Marsh Street, Division Street (Main Street to Marsh Street), Bruels Street (Glenwood to Main Street). These designations are recommended due to spacing considerations and anticipated growth of the Hospital, Clinic and Bethany College.

- Howard Drive between Blue Earth County CSAH 13 and LorRay Drive is recommended to be designated as a collector street (serves as primary east-west frontage road north of TH 14).

- Howard Drive and Countryside Drive in combination are recommended to be designated as a collector street system east of LorRay Drive.

As the area grows and adds additional local mileage, these and additional functional classification changes should be pursued. The existing functional classification map is shown in Figure 11. The future functional classification map was developed to accommodate future growth in the region (dashed routes). These routes show the appropriate location and spacing of future collector and arterial facilities (Figure 12). Partners should use the future functional classification map when making decisions and recommendations for proposed developments.

## 4.2 JURISDICTIONAL CHANGES

Roadway jurisdiction is an important element in the Transportation Plan because it affects a number of critical organizational functions and obligations (regulatory, maintenance, construction and financial). The primary goal in reviewing jurisdiction is to match the function of the roadway with the organizational level that is best suited to administer these responsibilities.

The jurisdiction process used in MATAPS '96 to identify jurisdictional transfer candidates is outlined as follows:

a. A functional classification plan was developed for the study area.

b. Jurisdictional transfer candidates were identified through the initial partnership meetings, small group meetings and the functional classification study.

c. Guidelines were developed for route jurisdiction (Appendix C).

d. Jurisdictional transfer candidates were reviewed against the jurisdictional guidelines, and reasons for and against the jurisdictional changes were noted.

e. Jurisdictional transfer candidates were rated according to how well they met the jurisdictional transfer guidelines. These rankings and their rationale were discussed with the partners. The transfer ratings were defined as follows:

   **Rating 1:** Transfer candidate **definitely meets** transfer guidelines.

   **Rating 2:** Transfer candidate **substantially meets** transfer guidelines.

   **Rating 3:** Transfer candidate **marginally meets** transfer guidelines **or** the transfer candidate is dependent on future growth and development of area.

   **Rating 4:** Transfer candidate **does not meet** transfer guidelines and therefore is not recommended as a future transfer.

f. Based on the personal potential jurisdictional transfers discussed by the partners, a summary of the mileage impacts for each jurisdiction was developed.

## Figure 11 – Existing Functional Classification

## Figure 12 – Future Functional Classification

Following the completion of the original MATAPS '96 plan, the partners began the process of changing route jurisdiction for some of the roadways. Table 4 identifies the roadways whose jurisdiction was changed following the completion of the MATAPS '96 plan.

**TABLE 4**
**Completed Jurisdictional Changes** (1)

| Route | Termini | | Original Jurisdiction | Transfer To |
|---|---|---|---|---|
| | From | To | | |
| TH 14 | TH 22 | East of Eagle Lake | State | Blue Earth Co. |
| TH 22 (old) | TH 14 | New TH 22 | State | Blue Earth Co. |
| BEC CR 193 | TH 14 | CSAH 12 | Blue Earth Co. | State |
| Victory Drive | CSAH 82 (Balcerzak Drive) | Madison Avenue | Mankato | Blue Earth Co. |
| CSAH 54 (Hoffman Road) | Victory Drive | TH 22 | Blue Earth Co. | Mankato |
| CSAH 3 (Thompson Ravine Road) | TH 14 | Fifth Street | Blue Earth Co. | Mankato |
| Stadium Road | CSAH 16 (Stoltzman Road) | Warren Street | Mankato | Blue Earth Co. |
| CSAH 82 (Victory Drive) | TH 22 | CSAH 83 | Blue Earth Co. | Mankato |
| CSAH 8 (Warren Street) | CSAH 60 (Stadium Road) | Cherry Street | Blue Earth Co. | Mankato |
| T-122 (CSAH 6) | TH 14 | CSAH 13 | Belgrade Twp. | Nicollet Co. |
| T-122 (Timm Road) | CSAH 13 | Lor Ray Drive | Belgrade Twp. | North Mankato |
| Lor Ray Drive | Country Side Drive | TH 22 (old) | Belgrade Twp. | North Mankato |
| CR 58 | CSAH 13 | TH 169 | Nicollet Co. | Belgrade Twp. |
| CR 117 | TH 60 | CSAH 69 | Blue Earth Co. | DNR |

(1) Jurisdictional transfers completed after MATAPS '96 study and prior to MATAPS 2003

The MATAPS 2003 plan development process included a review of the original list of potential jurisdictional transfers and an update of that list based on completed transfers to date. Table 5 contains discussion regarding potential jurisdictional transfers that were not completed after the original plan. Table 6 identifies the mileage of the remaining potential transfers.

## Table 5 – Potential Jurisdictional Transfers

## Table 5 – Potential Jurisdictional Transfers – Page 2

## Table 6 – Potential Jurisdictional Transfers Mileage